Nation’s First Medical Makerspace Opens Inside Texas Hospital

University of Texas Medical Branch and MakerNurse Provide 3D Printers, Laser Cutters and More to Help Clinicians Improve Patient Care

Boston, MA and Galveston, TX — MakerNurse and The University of Texas Medical Branch at Galveston today unveiled The MakerHealth™ Space at UTMB, the first makerspace in the country for health care providers. Supported in part by the Robert Wood Johnson Foundation, the MakerHealth™ Space in John Sealy Hospital will empower nurses and other medical staff to bring their ideas for improving health care to life and spread their innovations throughout the health care system.

Over the past two years, MakerNurse has uncovered resourceful nurses across the country who are hacking the supply closet and using everyday materials to improve upon and create new tools and devices that lead to better ways of caring for patients. Cough pillows made out of hospital blankets wrapped in medical tape, tactile patient call buttons using tongue depressors and pieces of silk – these are just some of the simple fixes made by nurses that ensure patient comfort and safety.

Closer to the patient than conventional engineering labs in America, nurses are uniquely positioned to spot suboptimal technology and design break-through solutions to improve care. But too often their ideas remain scribbled on the back of an envelope. The makerspace at UTMB provides nurses with direct access to robust tools, resources and expertise to build prototypes and test out their ideas.

“Health making takes the art of nursing to the next level,” said Jose Gomez-Marquez, co-founder of MakerNurse. “With the MakerHealth™ Space, nurses can take that epiphany that they’ve had at the bedside for how to improve the patient experience, and actually make it into something they can hold in their hand.”

The makerspace is stocked with adhesives and fasteners, such as Velcro and zip ties; textiles and electronics, including sensors and microcontrollers; and a range of tools, from pliers and sewing needles to 3D printers and laser cutters. The space is divided into a series of workstations, each equipped to address a specific medical challenge, such as fluid control or assistive technology. A “selfie station” in the makerspace helps medical makers capture and take credit for their devices, and develop “how-tos” so others can recreate their solutions.

Medical staff can use the makerspace to prototype a new tool, to upgrade an existing hospital device, such as adding a sensor to a take-home pill bottle to monitor use, or to customize materials for individual patients. All devices made in the makerspace are sterilized and tested through a quality improvement or institutional review board study before being used on the hospital floor.
The makerspace is on a patient floor of John Sealy Hospital at UTMB, ensuring that the ingenuity and making become part of the care delivery process. In the same way that a nurse would go to the pharmacy to pick up prescriptions, nurses can visit the makerspace to customize a wound dressing to fit a newborn, cut an IV shield down to size or 3D print clips to keep feeding tubes, catheters and other cables organized and out of patients’ way. MakerNurse hopes the makerspace will also offer insight into ways to reduce costs in the procurement process by making hospital supplies in-house.

“The MakerHealth space at UTMB will help bring nurse making to the forefront of health care innovation,” said David Marshall, Chief Nursing and Patient Care Services Officer at the UTMB Health System. “We know nurses have breakthrough ideas for improving health care. Providing them with the space, tools and materials to create these solutions, rather than outsourcing them to engineers and designers, just makes sense.”

While spearheaded by nurses at UTMB, the makerspace will be open to all medical staff and health professions students. Nurses also envision working with patients and caregivers to create devices that work for them.

“We’re excited to see nurses, clinicians, caregivers and patients join together to make health,” said MakerNurse co-founder Anna Young. “We look forward to welcoming more hospitals into the maker health movement”

MakerNurse has launched mobile makerspaces in several hospitals and nursing schools across the country, including Bon Secours St. Mary’s Hospital of Richmond, Virginia; Driscoll Children’s Hospital of Corpus Christi, Texas; Maimonides Medical Center in New York; The Mayo Clinic in Rochester, Minnesota; South Shore Hospital of South Weymouth, Massachusetts, Sierra Providence Health Network and Texas Tech University Health System of El Paso, Texas. Health making facilities for physicians, caregivers, and patients are also being developed across the country as part of MakerHealth, the parent initiative of MakerNurse.

“Makerspaces will help nurses and others on the frontlines of care not just identify problems, but solve them,” said Lori Melichar, Director, Robert Wood Johnson Foundation. “Equipping these innovators with the tools they need to make health care more affordable, effective, and patient-centered will help accelerate a Culture of Health in this country.”

The MakerHealth™ Space at UTMB will be spotlighted in a panel presentation on Saturday, September 25 at the 2015 World Maker Faire in New York.

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About MakerNurse
MakerNurse provides tools, resources and community to support nurses to innovate and bring nurse making to the forefront of health care. MakerNurse is powered by MakerHealth, an MIT spin-off initiative that brings together the worlds of making and healthcare to improve health and well-being for all. To learn more about MakerNurse, visit www.makernurse.org

About UTMB Health
Texas’ first academic health center opened its doors in 1891 and today comprises four health sciences schools, three institutes for advanced study, a research enterprise that includes one of only two national
laboratories dedicated to the safe study of infectious threats to human health, a Level 1 Trauma Center and a health system offering a full range of primary and specialized medical services throughout Galveston County and the Texas Gulf Coast region. UTMB Health is a part of the University of Texas System and a member of the Texas Medical Center.

**About the Robert Wood Johnson Foundation**
For more than 40 years the Robert Wood Johnson Foundation has worked to improve health and health care. We are striving to build a national Culture of Health that will enable all to live longer, healthier lives now and for generations to come. For more information, visit [www.rwjf.org](http://www.rwjf.org). Follow the Foundation on Twitter at [www.rwjf.org/twitter](http://www.rwjf.org/twitter) or on Facebook at [www.rwjf.org/facebook](http://www.rwjf.org/facebook).